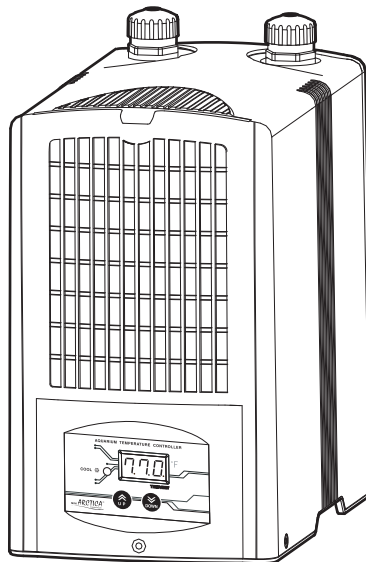


OWNER'S MANUAL

MINI ARCTICA[®]

TITANIUM CHILLER



DBI-050-D

SPECIFICATIONS

MINI ARCTICA[®] - TITANIUM CHILLER

Power Supply: 115 Volt 60Hz

Ozone Friendly Refrigerant (R-134a)

Distributed by: **TRANSWORLD AQUATIC ENTERPRISES, INC.**

TEL: (310) 672-0480 FAX: (310) 672-7261

www.jbjlighting.com

TABLE OF CONTENTS

1. IMPORTANT SAFETY INSTRUCTIONS	1~2
1-1. Warning Icons	3
1-2. Data Label	3
2. INTRODUCTION	4
3. RECEIVING AND INSPECTION	4
4. INSTALLATION	
4-1. Installation to Aquarium (or Tank)	5
4-2. How to Connect Hose	5
5. GETTING STARTED	
5-1. Start Up	6
6. MAINTENANCE	
6-1. Operation To Be Carried Out Every 6 Months	7
Table 1 Chiller Specifications	7
Figure 1 Electrical Diagram	8
Figure 2 Part name for Chiller	9
Figure 3 Exploded View and Part Name	10

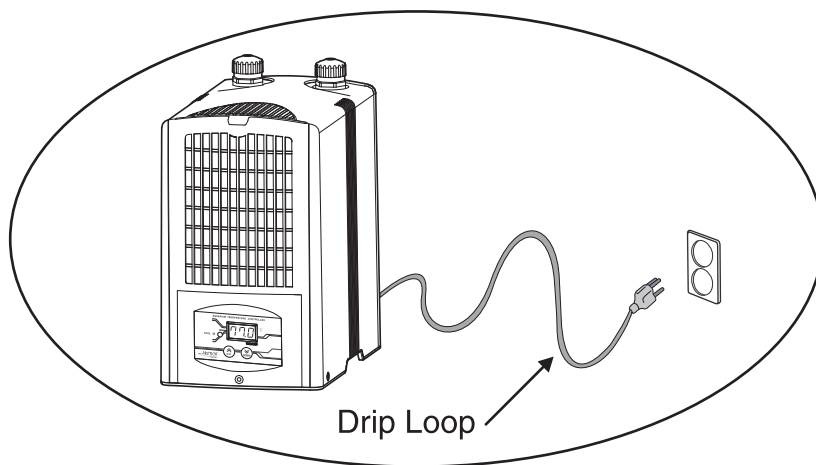
1. IMPORTANT SAFETY INSTRUCTIONS

WARNING: To guard against injury, basic safety precautions should be observed, including the following:

a) **READ AND FOLLOW ALL SAFETY INSTRUCTIONS**

b) **DANGER:** To avoid possible electric shock, special care should be taken since water is employed in the use of aquarium equipment. For each of the following situations, do not attempt repairs by yourself; return the appliance to an authorized service facility for service or discard the appliance:

1. If the appliance falls into the water, DON'T reach for it! First unplug it and then retrieve it. If electrical components of the appliance get wet, unplug the appliance immediately.
2. Carefully examine the appliance after installation. It should not be plugged in if there is water on parts not intended to be wet.
3. Do not operate any appliance if it has a damaged cord or plug, or if it is malfunctioning or has been dropped or damaged in any manner.
4. To avoid the possibility of the appliance plug or receptacle getting wet, position aquarium stand and tank to one side of a wall-mounted receptacle to prevent water from dripping onto the receptacle or plug. A "drip loop", shown in the figure below, should be arranged by the user for each cord connecting an aquarium appliance to a receptacle, or the connector if an extension cord is used, to prevent water traveling along the cord and coming in contact with the receptacle. If the plug or receptacle does get wet, DON'T unplug the cord. Disconnect the fuse or circuit breaker that supplies power to the appliance. Then, unplug and examine for presence of water in the receptacle.



-
- c) Close supervision is necessary when any appliance is used by or near children.
 - d) To avoid injury, do not contact moving parts or hot parts such as heater, reflectors, lamp bulbs, and the like.
 - e) Always unplug an appliance from an outlet when not in use, before putting on or taking off parts, and before cleaning. Never yank cord to pull plug from outlet. Grasp the plug and pull to disconnect.
 - f) Do not install or store the appliance where it will be exposed to the weather or to temperatures below freezing.
 - h) Make sure an appliance mounted on a tank is securely installed before operating it.
 - i) Read and observe all the important notices on the appliance.
 - j) If an extension cord is necessary, a cord with a proper rating should be used. A cord rated for less amperes or watts than the appliance rating may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.
 - k) This appliance has a polarized plug (one blade is wider than the other). As a safety feature, this plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician. Never use with an extension cord unless plug can be fully inserted. Do not attempt to defeat this safety feature.
 - l) Make sure the chiller is not allowed to overheat, chiller **MUST** have a minimum clearance of 1 foot before the intake of condenser and 1 foot behind the exhaust to evacuate heat.
 - m) Chiller should **NOT** be placed inside a cabinet stand. This will impede air flow and may reduce the efficiency of the chiller, and may cause permanent damage to appliance.
 - n) Always check water connections before operation for leaks.

CLEANING

It is important to keep this appliance clean. Always unplug the appliance before performing maintenance or cleaning of the exterior of this chiller. Wipe exposed surfaces carefully with a damp terry cloth to remove any dust or mineral deposits which may collect over time. Make sure all surfaces are dry before re-plugging into an electrical outlet.

SERVICING

In order to assure proper electrical connections and polarity, replacement parts and servicing should be performed by a qualified electrician.

OPERATION

Please carefully read the entire "Owner's Manual" for proper operation procedures before proceeding with turning on this appliance.

SAVE THESE INSTRUCTIONS

1-1. Warning Icons

Warning Icons in this manual are boldfaced for emphasis. The signal words **DANGER**, **WARNING** and **CAUTION** are used to indicate hazard seriousness levels as follow:



DANGER - Immediate hazard which WILL result in severe injury or death.



WARNING - Hazard or unsafe practice which COULD result in severe injury or death.

1-2. Data Label

The Chiller data label contains identification information. If the data label is missing or damaged, contact your local distributor and request a replacement.

MINI ARCTICA® TITANIUM CHILLER THE MOST ADVANCED AQUARIUM COOLER	
ITEM	MINI
Model	DBI-050-D
Horsepower	1/15HP
BTU	900 BTU/h
Amps	2.0A
Voltage	115V
Fuse Size	5A / 250V
Flow rate	110~160 gal/h
Dims-(L×W×H)	7,7×12,6×14,1
Weight	28lbs
Water Connection	1/2"
Serial NO.	
Distributed by TRANSWORLD AQUATIC ENTERPRISES, INC. TEL:(310)627-0480 FAX:(310)627-7261	

2. INTRODUCTION

Thank you for purchasing the MINI **ARCTICA® - Titanium Chiller**. This powerful cooling system guarantees consistent water temperatures with the most advanced features on the market.

All models are specifically designed for longterm performance with proper maintenance and operation and provide the **BEST VALUE** in the industry.

Quality: 1 Year Limited Warranty on all parts & labor from the date of purchase.

Service: Qualified technicians are available for topics ranging from chiller sizing, performance troubleshooting, and providing detailed instructions for maintenance procedures.

3. RECEIVING AND INSPECTION

Inspect the chiller closely when it is received. Record any indication of damage on the delivery receipt, especially if the chiller will not be immediately uncrated. Obtain the delivery person's signed agreement to recorded damages to facilitate future insurance claims.

Since the chiller is shipped F.O.B. Factory, the manufacture's responsibility for the shipment ceases when the carrier signs the bill of lading.

If goods are received short or damaged condition, notify the carrier and insist on a notation of the loss or damage across the face of the freight bill. Otherwise no claim can be enforced against the carrier.

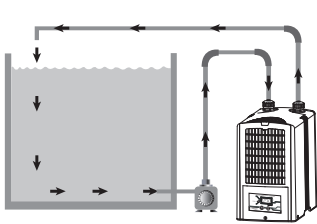
If concealed loss or damage is discovered, notify your carrier at once and request an inspection. This is absolutely necessary. Unless you do this, the carrier will not consider any claim for loss or damage. The carrier will make an inspection and may grant a concealed damage notation. If you give the carrier a clear receipt for the goods that have been damaged or lost in transit, you do so at your own risk and expense.

The manufacturer is willing to assist you in collecting claims for loss or damage. Willingness does not make the manufacturer responsible for collecting claims or replacing material. Claim filing and processing is your responsibility.

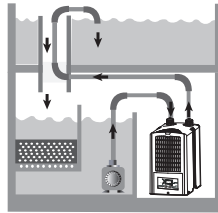
4. INSTALLATION

Place the chiller in a ventilated place and away from sources of heat, making sure that the front and rear of the chiller have at least 1 foot clearance for air flow. The chiller must have proper air flow to function correctly. **DO NOT PLACE INSIDE AQUARIUM STANDS THAT ARE ENCLOSED!**

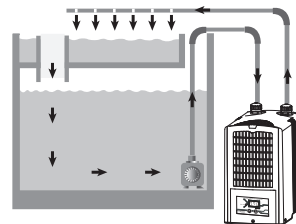
4-1. Installation to Aquarium (or Tank)



1. Connection of outside circulation pump



2. Connection of circulation pump in the filter



3. Connection of inside circulation pump

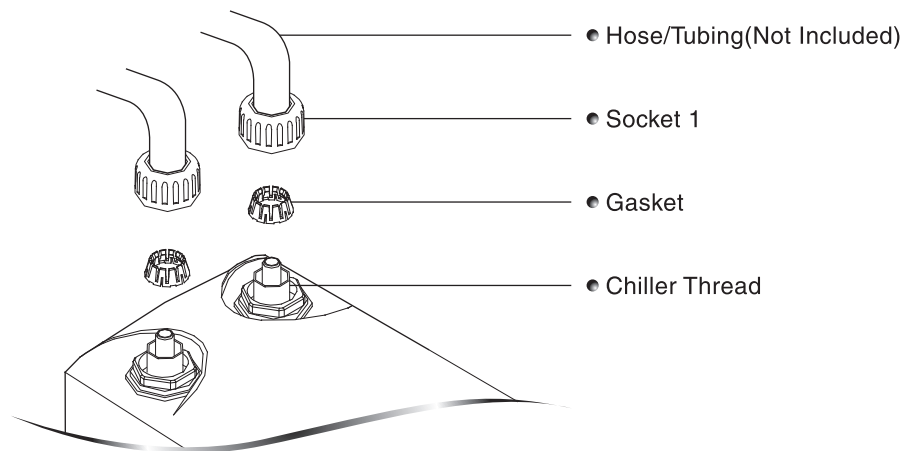
4-2. How to Connect Hose

- 1.) method of connecting hose to **chiller**.
 - ① Unscrew socket 1.
 - ② Insert hose tube into socket 1.
 - ③ Insert hose tube into gasket.
 - ④ Screw onto **chiller** and hand tighten.

- 2.) Checking equipment connection.



These units have been performance tested and may contain moisture in the heat exchange chamber.

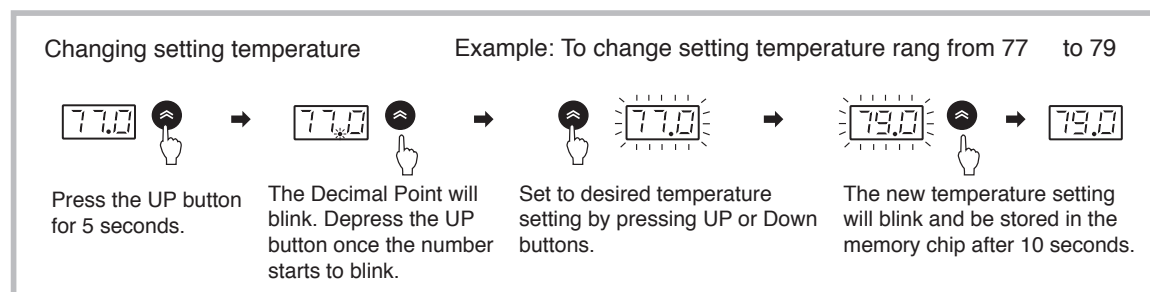


5. GETTING STARTED

5-1. Start Up

- 1.) Once all connections are made, circulate water through chiller before turning on the unit.
- 2.) Check all connections for leaks.
- 3.) Verify electricity rating, and then plug power cord into a dedicated electrical outlet.
- 4.) This unit has been factory-set at 77F.
- 5.) The Digital Display will read the current water temperature.
- 6.) The light indicator will begin to blink.
- 7.) Chiller will automatically turn on within 3 minutes.
- 8.) Your chiller has now been activated.

* This unit contains an Auto Digital Temperature Control System. This built-in thermostat will turn itself on/off within +/- 1°F according to the desired set temperature.



* Error representation


The thermostat has self-diagnostic function, so the letters below will be appeared on display if error occurs.

Indication	Descriptions	Please try to check and repair it following the instructions below. Otherwise, contact us for warranty service.
	Abnormal signal of sensor	Please check it if there is any damage to the sensor wiring or water soaked into the joints before repairing.
	Overcooling	Please check it if the water temperature is below -5°C(celsius degree), the sensor is out of order, or there is bad connection before repairing.
	Short circuit	Please check it if there is short circuit due to pressed or torn sensor wire before repairing.
	Disconnection	Please check it if the sensor wire is disconnected before repairing.

Calibrating Water Temperature with Temperature Controller

It is recommended that you calibrate your chiller to your current water temperature upon initial installation.

Calibration Procedure



Press the UP and DOWN buttons simultaneously for 5 seconds. "CA" will appear on display screen.

Depress both buttons when "CA" changes to numbers. The numbers on the display is a reading of the current water temperature from the chiller's integrated probe. Calibrate to your tank's current water temperature by pressing the UP or DOWN buttons and depress.

The newly calibrated temperature setting will blink and be stored in the memory chip after 10 seconds.

Example : The actual water temperature is 65 , but the thermostat indication is 70 . (The actual temperature differs from the thermostat indication.)

6. MAINTENANCE

WARNING

Always unplug the chiller from the electrical outlet when performing maintenance procedures

6-1. Operations To Be Carried Out Every 6 Months

- Cleaning of the filter
Remove the filter and with a vacuum cleaner or jet of air to clean dust and debris from impeding air flow.
- Cleaning of the Heat exchanger
The elimination of deposits of impurities, bacteria, or metabolic waste not captured by the pre-filter are vital for the performance of this chiller. Circulate clean water in the opposite direction through heat exchange chamber for 30 minutes.

Table 1 **CHILLER SPECIFICATIONS**

ITEM	MINI
Model	DBI-050-D
Horsepower	1/15HP
BTU	900 BTU/h
Amps	2.0A
Voltage	115V
Fuse Size	5A / 250V
Flow rate	110~160 gal/h
Dims-(W×D×H)	7.7"×12.6"×14."1
Weight	28.66lbs
Water Connection	1/2"

ELECTRIC WIRING DIAGRAM OF MINI ARCTICA MODEL:DBI-050-D

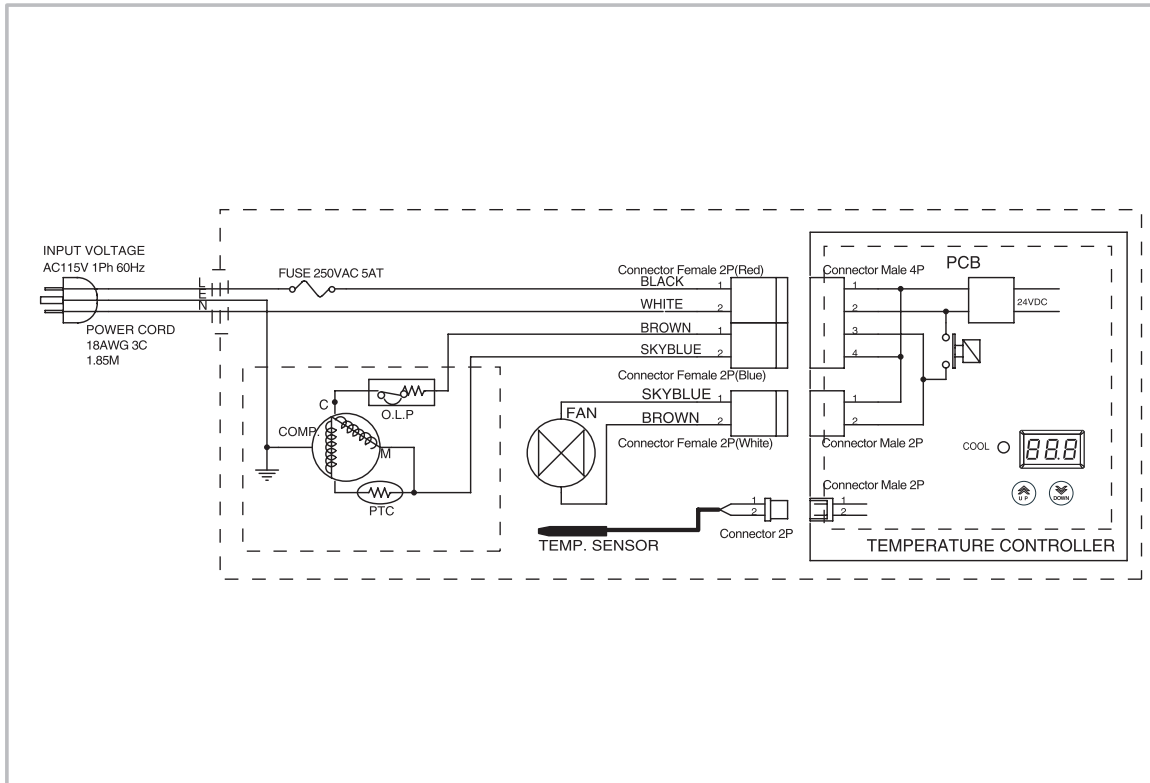
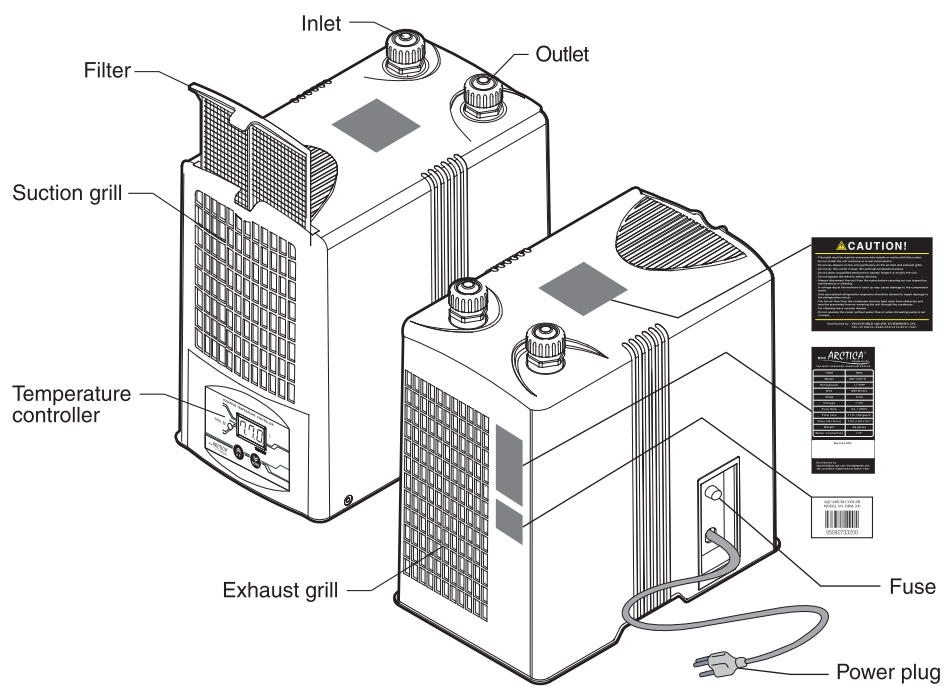


Figure 1
Electrical Diagram

●DBI-050-D



●TEMPERATURE CONTROLLER

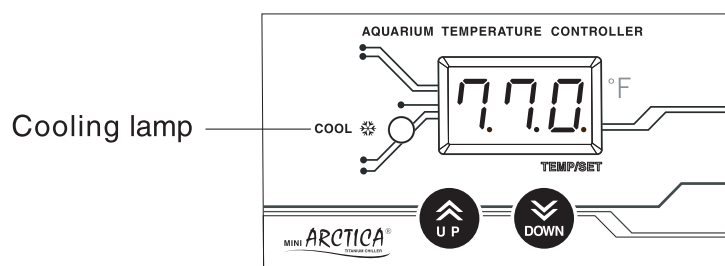


Figure 2
Part Name for Chiller

● DBI-050-D

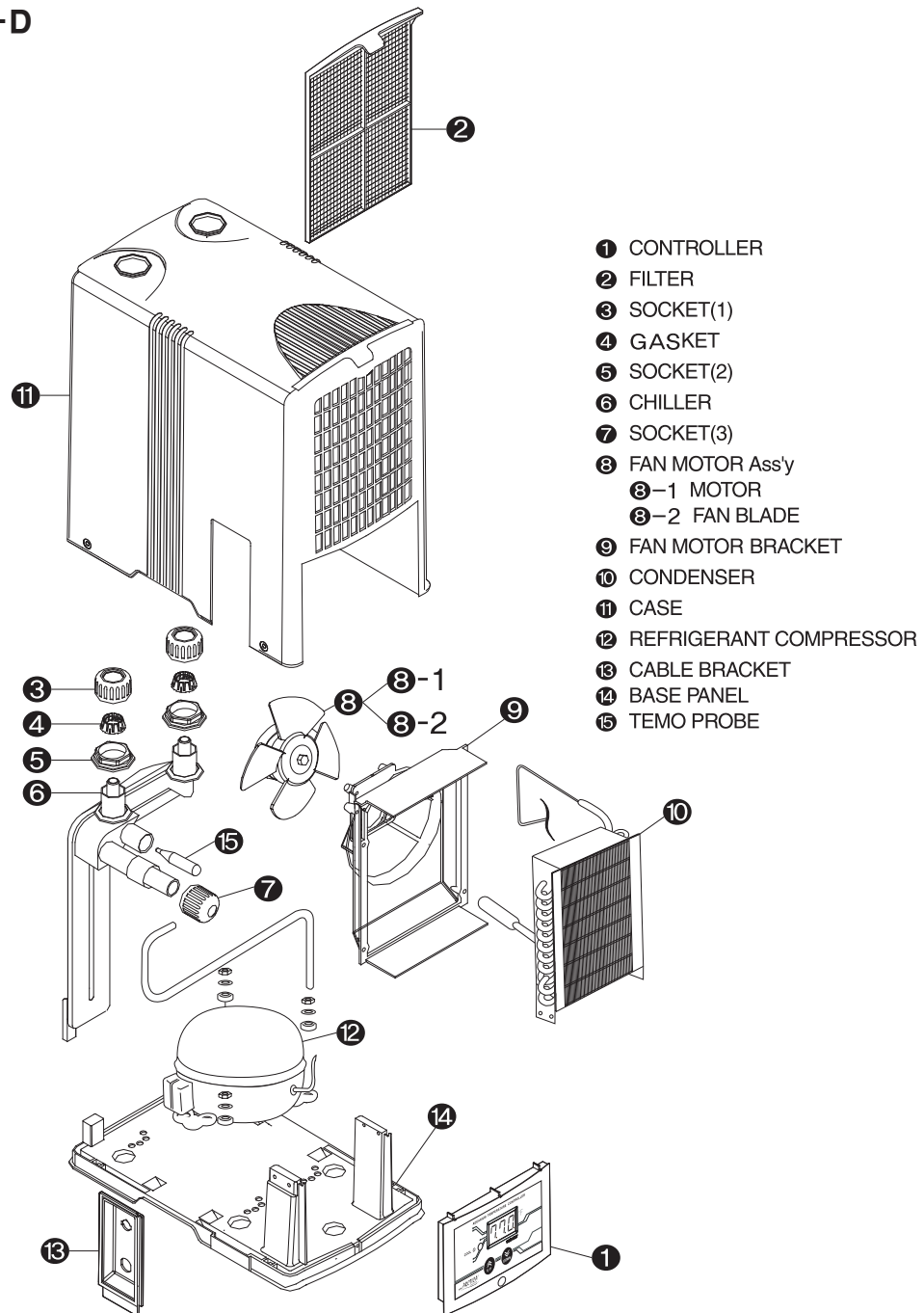


Figure 3
 Exploded View and Part Name



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MINI ARCTICA[®]

TITANIUM CHILLER

The Most Advanced Aquarium Cooler!



- Titanium Heat Exchanger
- Energy Efficient Design
- Low Noise Level
- Built-In Thermostat System
- Compact Footprint Size

www.jblighting.com



STAMP
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TRANSWORLD AQUATIC

Warranty Dept.
3730 West Century Blvd. Suite 6
Inglewood, CA 90308

cutting-plane line

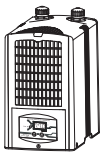
For the CUSTOMER



MINI ARCTICA[®]

TITANIUM CHILLER

The Most Advanced Aquarium Cooler!



- Titanium Heat Exchanger
- Energy Efficient Design
- Low Noise Level
- Built-In Thermostat System
- Compact Footprint Size

www.jblighting.com

WARRANTY INFORMATION

MINI ARCTICA[®] TITANIUM CHILLER 1 YEAR LIMITED WARRANTY



This JBL MINI ARCTICA[®] - Titanium Chiller is warranted to the original purchaser against defective material and workmanship for 1 year from the date of original purchase. This warranty is valid only under the following conditions: additions, modifications, or changes made to the chiller by the purchaser and not by the manufacturer shall void this warranty. Damages brought on by abuse, misapplication, or mishandling also voids this warranty. Please refer to the "Operation Manual" for proper usage.

This warranty is limited to the repair or replacement of the chiller at the discretion of the manufacturer. This warranty does not cover personal injury, property loss, including livestock or damage (direct, incidental, or consequential) arising out of use of this product. This warranty gives you specific rights to you, which may vary from state to state.

This warranty card must be filled out completely and returned within (14) days from the date of purchase. Failure to do so will void this warranty. A proof of purchase from an authorized dealer must be provided when making a warranty claim. Upon discovery of a defect call (310) 672-4099 / (310) 672-4021 for an authorization Number. All warranty claims will require prepaid shipping to :

Transworld Aquatics Enterprises, Inc.
3730 Unit 6, West Century Blvd. Inglewood, CA 90308

SERIAL No.

cutting-plane line

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Transworld Aquatics Enterprises, Inc.
3730 Unit 6, West Century Blvd.
Inglewood, CA 90308

MINI ARCTICA[®] WARRANTY CARD

* Please fill out completely and return within 14 days from date of purchase. *

CUSTOMER NAME:

ADDRESS:

PHONE:

CITY:

STATE:

ZIP:

DATE OF PURCHASE:

HORSEPOWER:

DEALER NAME:

STATE:

SERIAL No.